STATE OF MARYLAND

DHMH

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February 3, 2012

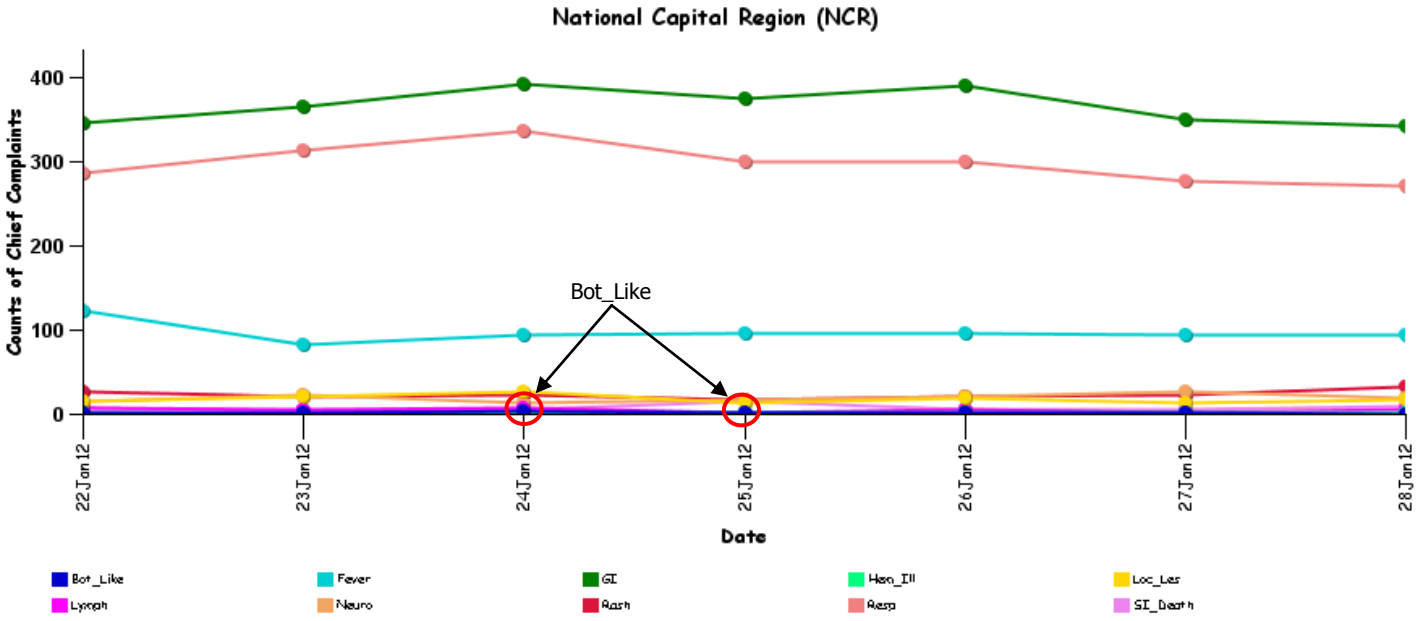
Public Health & Emergency Preparedness Bulletin: # 2012:04
Reporting for the week ending 01/28/12 (MMWR Week #04)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

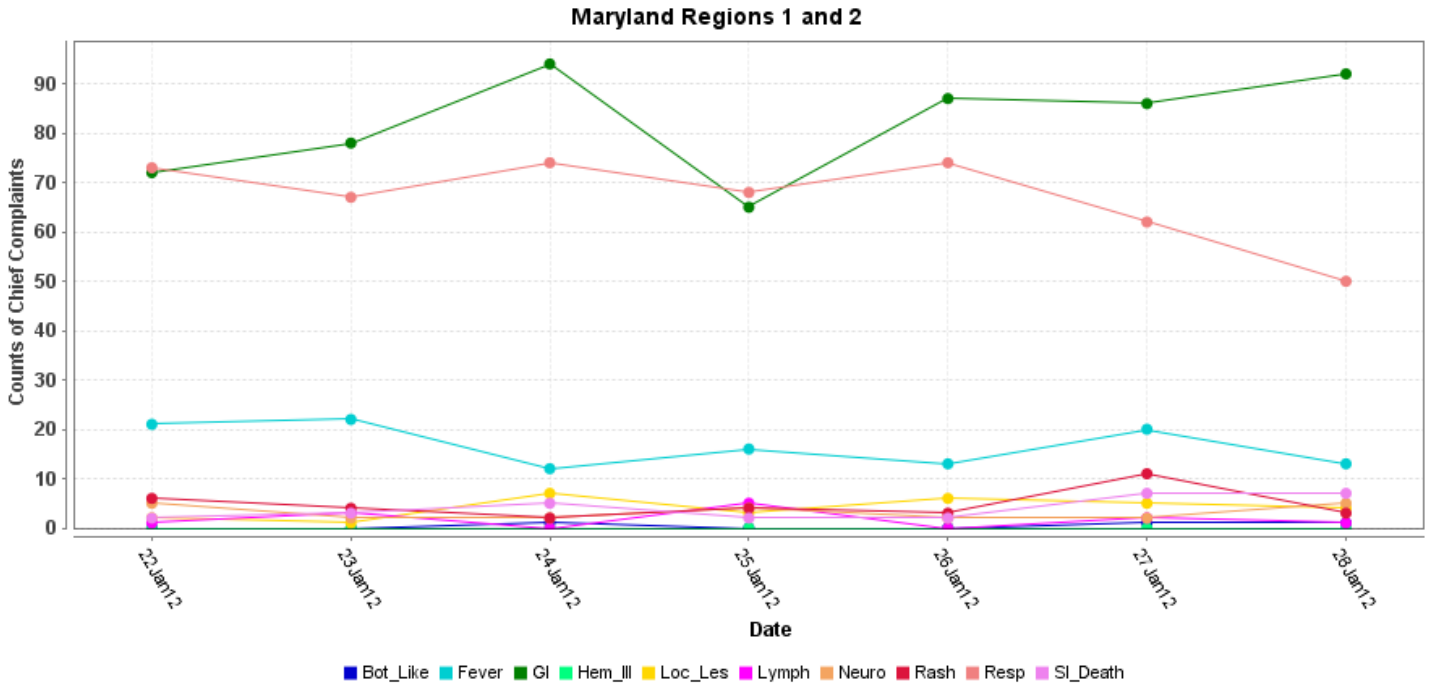
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

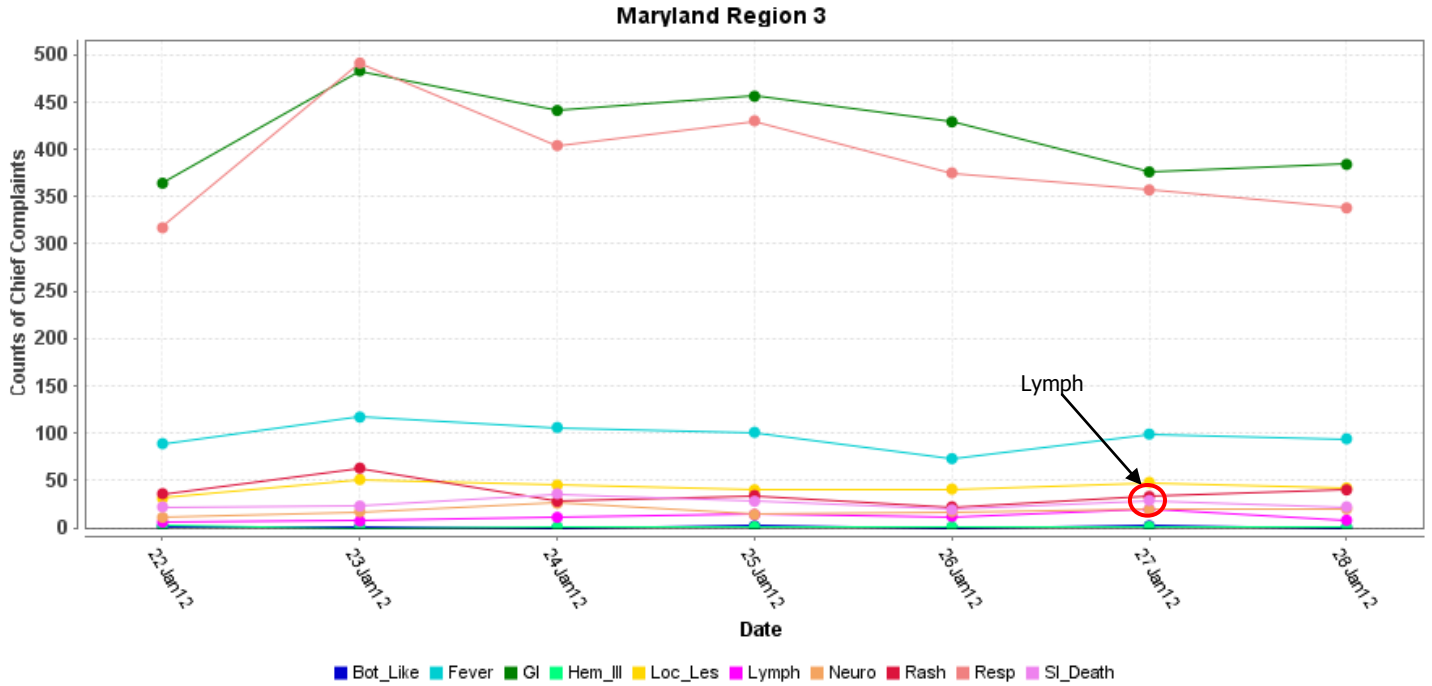


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

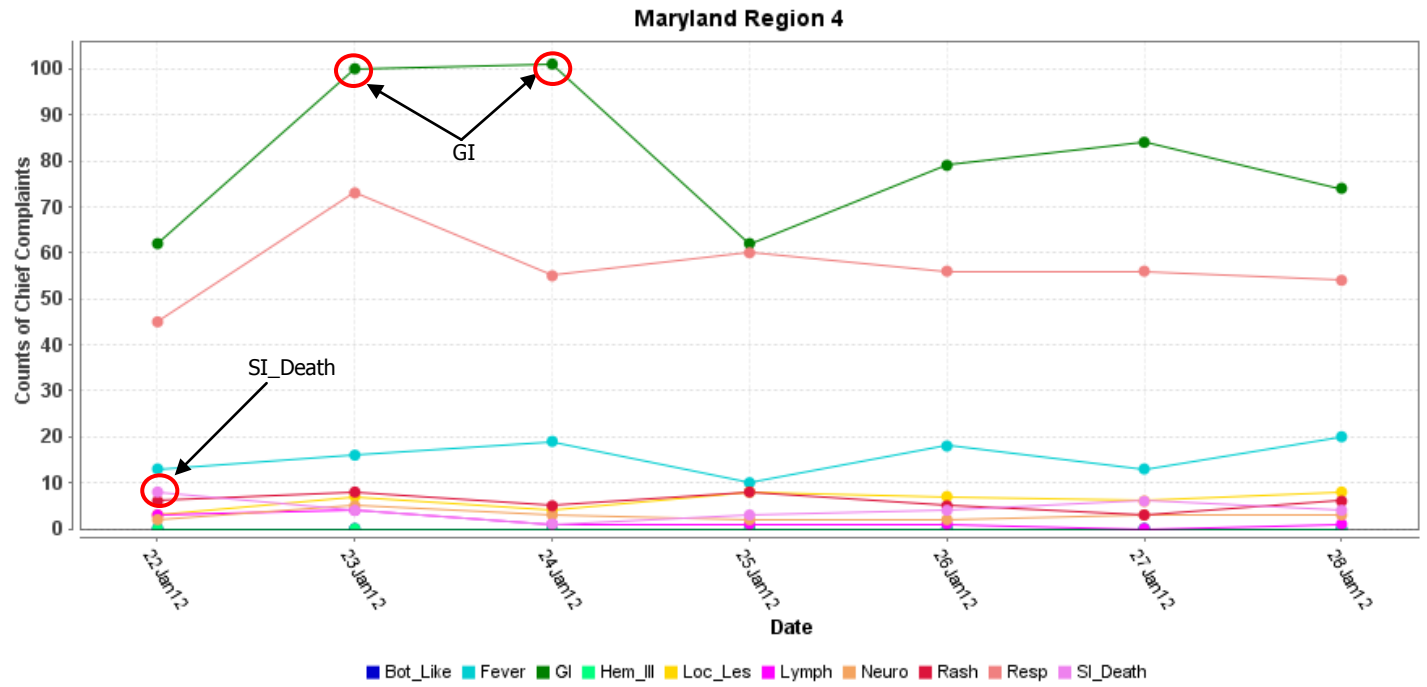
MARYLAND ESSENCE:



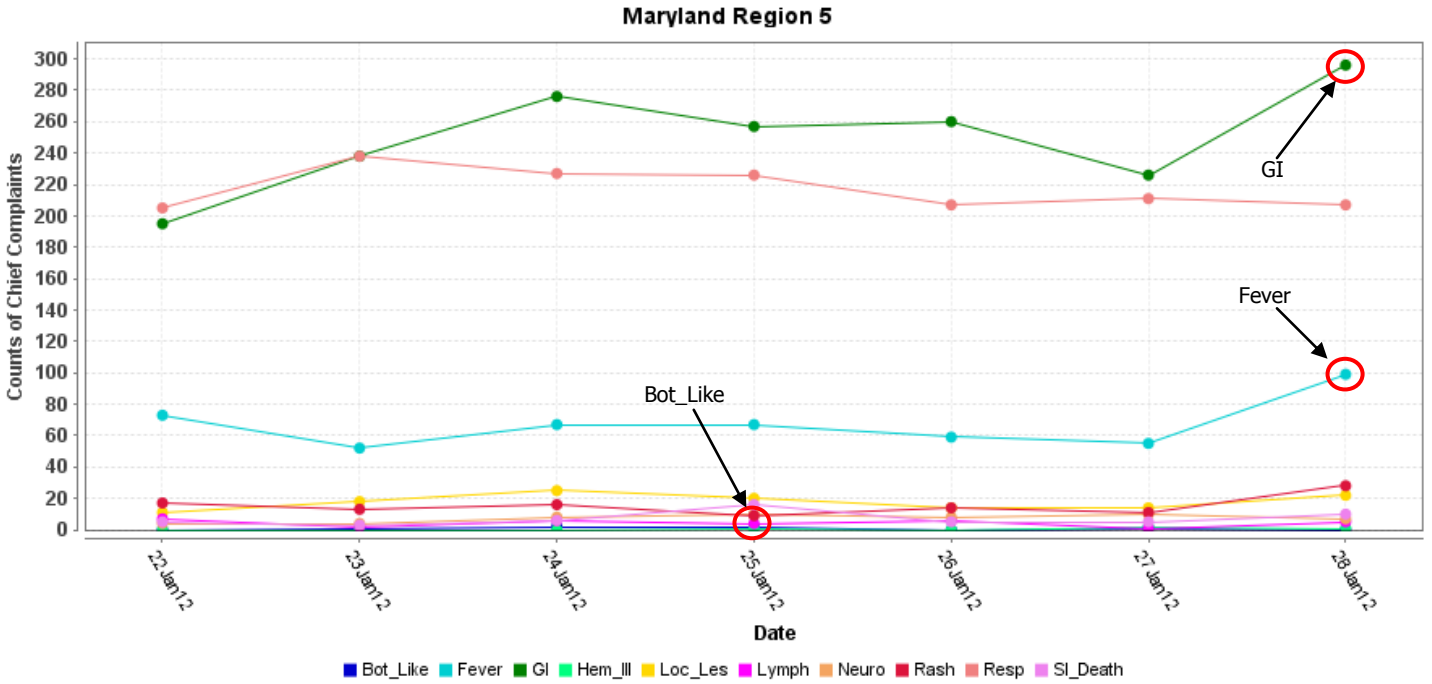
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



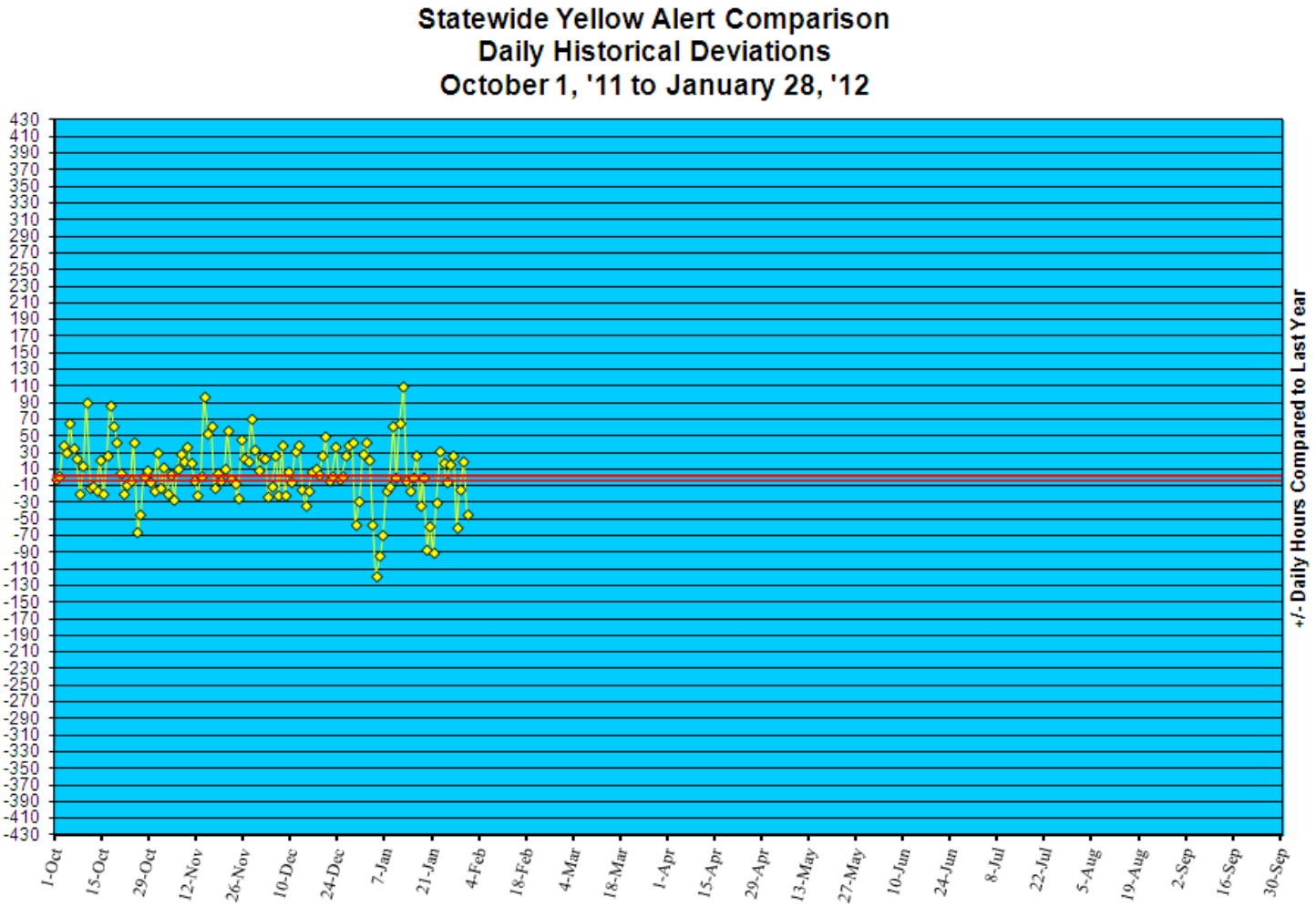
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2011 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (January 22 – January 28, 2012):	12	0
Prior week (January 15 – January 21, 2012):	9	0
Week#4, 2011 (January 23 – January 29, 2011):	5	0

11 outbreaks were reported to DHMH during MMWR Week 4 (January 22 – January 28, 2012)

8 Gastroenteritis outbreaks
3 outbreaks of GASTROENTERITIS in Nursing Homes
4 outbreaks of GASTROENTERITIS in Assisted Living Facilities
1 outbreak of GASTROENTERITIS in a Hospital

2 Foodborne outbreaks
1 outbreak of GASTROENTERITIS/FOODBORNE associated with a School
1 outbreak of GASTROENTERITIS/FOODBORNE associated with an Out of State outbreak

1 Respiratory illness outbreak
1 outbreak of PNEUMONIA in an Assisted Living Facility

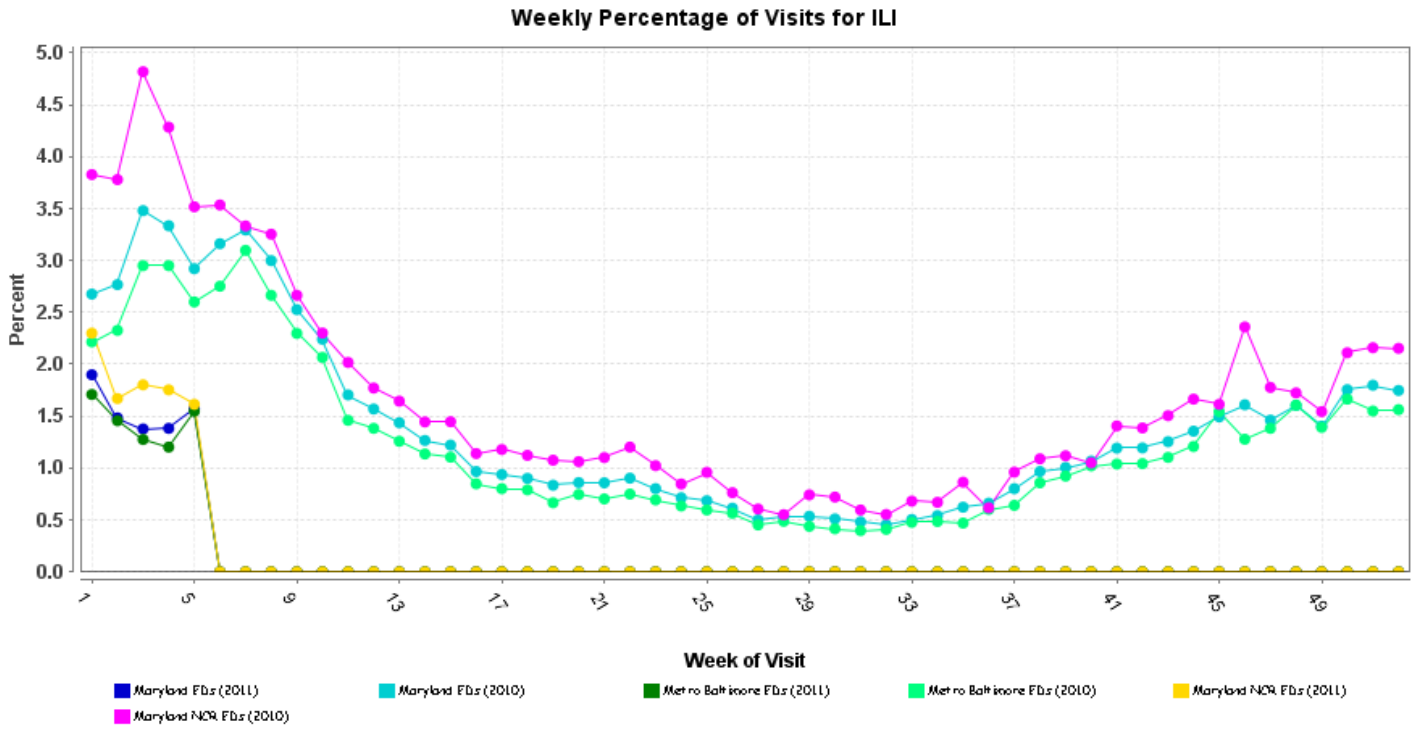
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 4 was: No activity, Minimal Intensity.

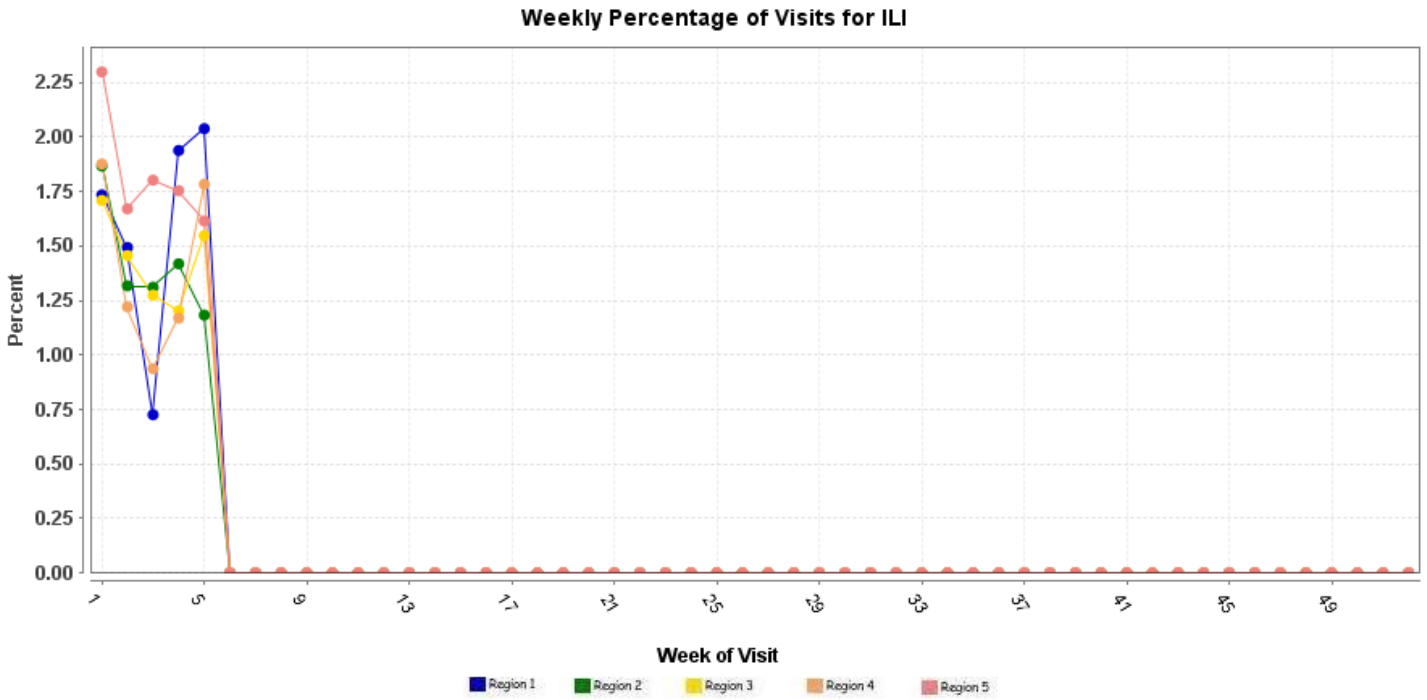
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



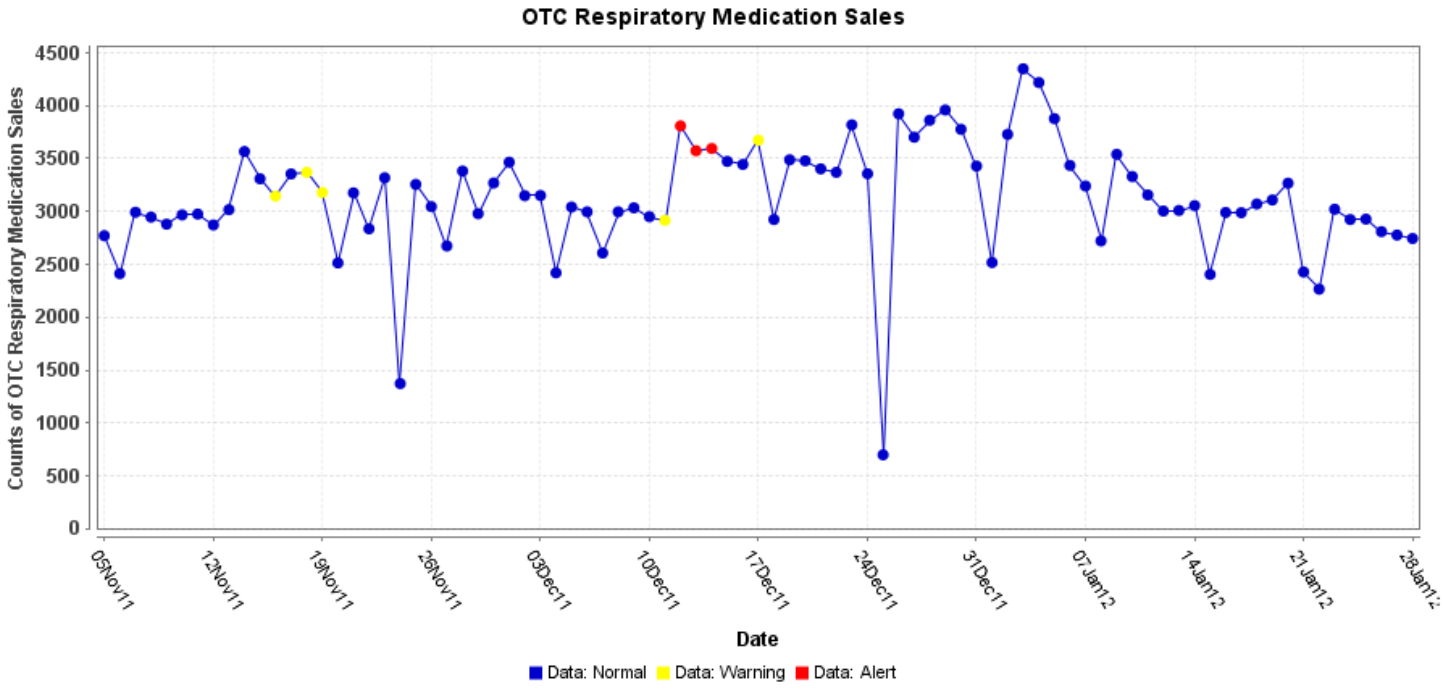
* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2011 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

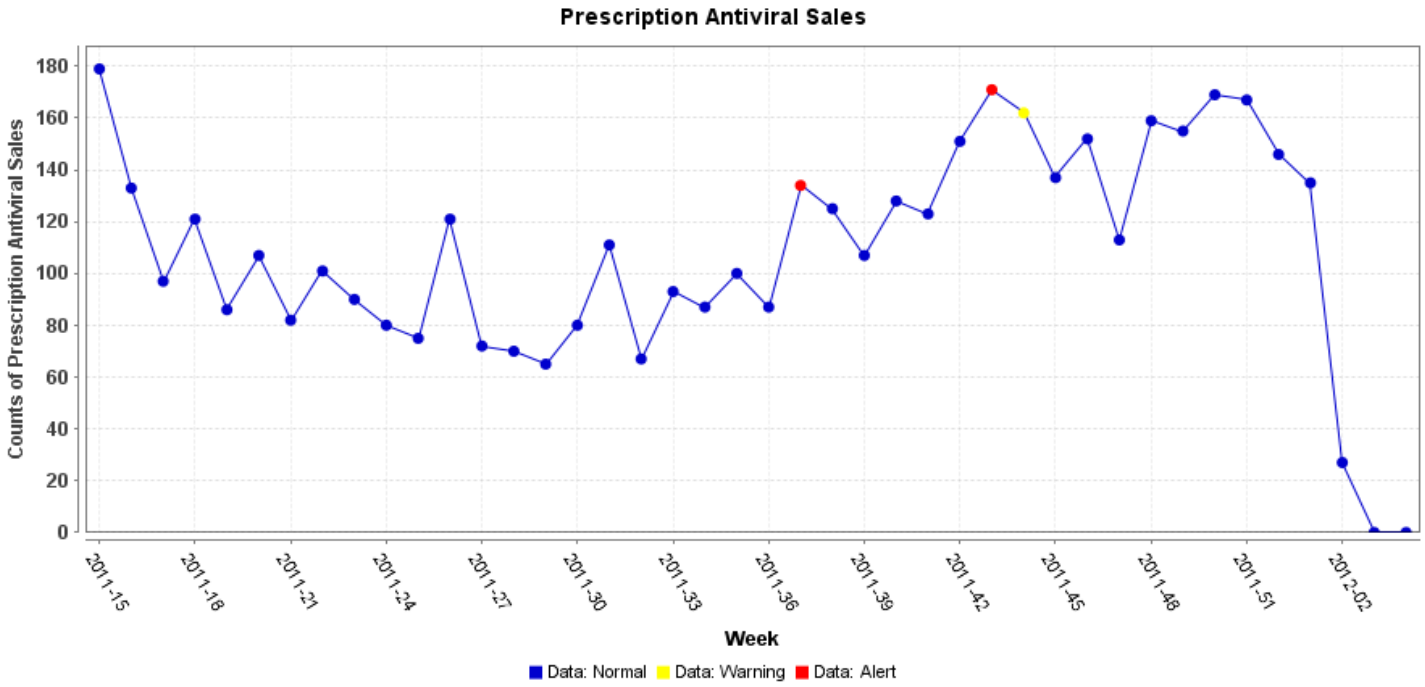
OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PRESCRIPTION ANTIVIRAL SALES:

Graph shows the weekly number of prescription antiviral sales in Maryland.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of January 20, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 583, of which 344 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS

CAMPYLOBACTERIOSIS (PENNSYLVANIA, MARYLAND): 27 January, 2012, 6 people were infected with campylobacteriosis from raw milk ingestion from the Family Cow dairy store in Chambersburg, PA, including 3 in Maryland, the state Department of Health and Mental Hygiene said Friday, 27 Jan 2011. The state agency and the health department in Pennsylvania are advising consumers to discard any product bought from this farm since 1 Jan 2012. The implicated milk comes in plastic gallon, half gallon and pint containers and is sold directly to consumers on the farm and at drop off points and retail stores in Pennsylvania. It's illegal to sell unpasteurized milk in Maryland, though some consumers have reported getting it anyway at pre-determined drop off points. Raw milk has become popular with some people who believe it has superior nutrition because it's not heated to kill germs like pasteurized milk. Studies, however, have not confirmed this, and federal and state authorities continue to warn about the dangers of unpasteurized milk, ice cream, yogurt and some cheeses. "We're disappointed that this is being made to look definite when, one, the testing hasn't been completed, and two, the test they did do came from an open jug of milk in one family's refrigerator," said Edwin Shank, who is a fourth generation owner of the Family Cow farm. He said the bacteria is easily spreadable can could have been introduced into the jug once it was opened by a family member who was already infected. He said he's never heard of a customer becoming sick from his milk, and no one on the farm has been sickened. And he said through 5 generations his family has been drinking raw milk from their cows "for 100 years." Shank said that he has a good relationship with the health department and wants customers to know that he disinfects his pipes after every milking and sends samples of milk for testing 6 times as often as is legally required. He's been selling organic milk for 6 years and added raw milk 3 years ago because of strong demand. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS (MASSACHUSETTS): 26 January 2012, A Massachusetts resident who first tested positive for brucellosis has now been confirmed to not have the infection, according to an email from the assistant commissioner of the Massachusetts Department of Agricultural Resources (MDAR). "While initial test results did show up positive, further, more specific and accurate testing by the CDC confirmed that the person does not have brucellosis," Nathan L'Etoile wrote in the message forwarded by the NOFA/Massachusetts Raw Milk Network. As a result, the MDAR "will be rescinding the Cease and Desist from the sale of Raw Milk" order that had been issued in the state last week, the email stated. The Massachusetts Department of Public Health (DPH), in an email, also confirmed that "the patient did test negative for brucellosis. The milk and the cows also tested negative for any brucellosis bacteria. Neither DPH or DAR have any health concerns at this time." On 20 Jan 2012, the MDAR and the DPH issued a consumer alert for raw milk from Twin Rivers Farm in Ashley Falls, MA "due to the possibility of raw milk being contaminated with Brucella." That earlier news release stated, in part: "This investigation is being conducted in response to a suspected human case, following an individual's contact with this farm. The presence of Brucella in raw milk represents a significant danger to public health." (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

SALMONELLOSIS (RUSSIA): 23 January 2012, AFSCA, the Belgian food safety authority, announced today, 23 Jan 2012, that powdered milk imported from Belgium was believed responsible for infecting infants in the north of Russia with *Salmonella Oranienburg*. AFSCA reports that one production lot comprising 19 tons was implicated; 16 tons were shipped to Russia, and the remaining 3 tons, mixed together with other production lots, were supplied to several developing countries. None of the contaminated milk powder was sold in Belgium, or in any other European country. AFSCA has inspected the manufacturing facility and is confident that all necessary measures have been taken to prevent a reoccurrence of the contamination. The powdered infant formula manufactured by a Belgian company is responsible for 16 cases of salmonellosis in [Usolye-Sibirskoye, Irkutsk, Russia], according to a report carried on ProMED-mail. The illnesses occurred between 2 Nov 2011 and 13 Jan 2012. 13 of the outbreak victims were children aged 2 weeks to 7 months; one was a 4-year old child, and 2 victims were adults aged 24 and 29 years. All 16 confirmed victims were infected with *S. Oranienburg*. The implicated milk was identified as ["Damil 1 Lux"] a dry milk formula. It was manufactured in Belgium by FASSKA S.A., and distributed in the Russian Federation by JSC "STI Damil" (Moscow). The implicated batch of dry milk formula carried a date of manufacture of 01.2011. The Russian distributor has recalled the dry milk formula, which was supplied to wholesale suppliers, large retail chains, pharmacies, and health care institutions. Belgium has notified the Rapid Alert System for Food and Feed ("RASFF" - Notification no. 2012.0094, issued 17 Jan 2012 and updated 20 Jan 2012) that dry milk infant formula linked to an outbreak of *S. Oranienburg* was supplied to Burundi, The Democratic Republic of the Congo, Congo-Brazzaville, Haiti, Mozambique, and the Russian Federation. No other reports of *S. Oranienburg* illnesses from countries other than Russia are available. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (OMAN): 22 January 2012, Smuggled livestock could have caused the Crimean-Congo haemorrhagic fever (CCHF) infection of a Bangladeshi expatriate, who died last week in Buraimi [Al Buraimi governorate], according to reliable sources. Sources at the Buraimi Hospital said the death of an illegal Pakistani resident, who was involved in handling livestock, could also have been caused by CCHF 2 week ago. "There is a thriving trade of illegally imported livestock as it comes much cheaper than the livestock imported with proper certification from the authorities." An unidentified source claimed that mostly these smuggled livestock come from the Horn of Africa. The unclaimed body of the Pakistani was still lying in the Buraimi hospital morgue but no investigation was carried out to determine his death although his symptoms were similar to CCHF. It is believed that the infected livestock smuggled into country could have infected the deceased as Oman is believed to be largely free of such tick-borne viral infection. The middle-aged Bangladeshi who died last week was not a woman as reported earlier. He was a cook working with a restaurant in Buraimi. The health authorities are confused about how the restaurant employee contracted the infection when he had no direct contact with livestock. However, a source believes that the Bangladeshi could be working part time in loading/unloading of smuggled livestock and could have contracted infection while handling the 'illegal cargo'. The Ministry of Health (MoH) has cautioned the public about misleading information about CCHF. "A lot of the information is exaggerated," a statement issued by the MoH said on Sun 22 Jan 2012. The Ministry statement said that the disease is transmitted by ixodid (hard) ticks, especially those of the genus, *Hyalomma*, which is both a reservoir and a vector for the CCHF virus. Numerous wild and domestic animals, such as cattle, goats, sheep, and hares, serve as amplifying hosts for the virus. Transmission to humans occurs through contact with infected animal blood or ticks. The fever can be transmitted from one infected human to another by contact with infectious blood or body fluids. Documented spread of CCHF has also occurred in hospitals due to improper sterilisation of medical equipment, re-use of injection needles, and contamination of medical supplies. The MoH statement stressed that only one case was reported with CCHF. "The victim presented late for medical attention and passed away within few hours, on Wednesday [18 Jan 2012], in Buraimi hospital. No other cases with similar presentation are reported," the statement reiterated. Scoffing at rumours, the Ministry spokesperson said that anti-viral medicine was only given to the healthcare providers in Buraimi Hospital and the immediate contacts including the colleagues of the deceased Bangladeshi cook. "The doctors and nurses are working in a safe environment and there is no case of CCHF among healthcare providers," the spokesperson added. Urging residents of Buraimi, which borders with Al Ain, not to panic, the MoH spokesperson said: "There is no need to worry as no new cases [have been] reported among the community in Burami, or the staff of the hospital, or the health centre." The Ministry also [said that] reports in a section of the media that restaurants in Buraimi had been closed down [were incorrect]. The only restaurant that was closed for further investigation is the one where the infected individual was working. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable